

PATENT
Serial No. 10/530,684
Amendment in Reply to Office Action of February 13, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A high-pressure discharge lamp provided with a discharge vessel having a wall of a ceramic material, and provided with at least one electrode feedthrough comprising a cermet rod, which is secured, at a first end, to a first end of an electrode pin by means of a welded joint, which electrode pin is substantially composed of tungsten and extends in line with the cermet rod, wherein the electrode pin comprises a solidified tungsten melt at its first end in the vicinity of the interface between electrode pin and cermet rod without contacting the cermet rod.

2. (Previously presented) A lamp as claimed in claim 1, wherein the solidified tungsten melt has a dimension that is at most equal to the diameter of the electrode pin, and the distance from said solidified tungsten melt to the interface between electrode pin and cermet rod is smaller than half the diameter of the electrode pin.

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3. (Previously presented) A lamp as claimed in claim 1, wherein the electrode pin exhibits, at its first end, a tungsten melt in three locations on its circumference, which tungsten melts are arranged at an angle of 120° with respect to each other and are at the same distance from the interface.

4. (Previously presented) A lamp as claimed in claim 1, wherein the cermet rod is connected at a second end to a niobium pin.

5. (Previously presented) A lamp as claimed in claim 1, wherein the electrode pin carries a tungsten electrode spiral at a second end.

6. (Withdrawn) A method of manufacturing an electrode feedthrough for a high-pressure discharge lamp comprising:
arranging a cermet rod such that a first end butts against a first end of a substantially tungsten electrode pin situated in line with the cermet rod, and
directing a laser beam at the first end of the electrode pin, at a target point in the vicinity of the interface between

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electrode pin and cermet rod, as a result of which a welded joint is obtained at the interface between cermet rod and electrode pin and, in addition, a melt, which solidifies upon cooling, is formed at the target point on the first end of the electrode pin.

7. (Withdrawn) A method as claimed in claim 6, wherein two or more laser beams are directed at two or more target points on the circumference of the first end of the electrode pin, which target points are situated on the circumference of the electrode pin so as to make equal angles with each other and are situated at an equal distance from the interface between electrode pin and cermet rod.

8. (Withdrawn) A method as claimed in claim 7, wherein three laser beams are applied at an angle of 120°.

9. (New) A high-pressure discharge lamp provided with a discharge vessel having a wall of a ceramic material, and provided with at least one electrode feedthrough comprising a cermet rod, which is secured, at a first end, to a first end of an electrode pin by means of a welded joint, which electrode pin is substantially composed of tungsten and extends in line with the cermet rod, wherein the electrode pin comprises a solidified

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tungsten melt at its first end in the vicinity of the interface between electrode pin and cermet rod, wherein the electrode pin exhibits, at its first end, a tungsten melt in three locations on its circumference, which tungsten melts are arranged at an angle of 120° with respect to each other and are at the same distance from the interface.

10. (New) A lamp as claimed in claim 9, wherein the solidified tungsten melt has a dimension that is at most equal to the diameter of the electrode pin, and the distance from said solidified tungsten melt to the interface between electrode pin and cermet rod is smaller than half the diameter of the electrode pin.

11. (New) A lamp as claimed in claim 9, wherein the electrode pin exhibits, at its first end, a tungsten melt in three locations on its circumference, which tungsten melts are arranged at an angle of 120° with respect to each other and are at the same distance from the interface.

12. (New) A lamp as claimed in claim 9, wherein the cermet rod is connected at a second end to a niobium pin.

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13. (New) A lamp as claimed in claim 9, wherein the electrode pin carries a tungsten electrode spiral at a second end.

14. (New) A lamp as claimed in claim 9, wherein the electrode pin comprises a tungsten electrode spiral formed from the electrode pin at a second end.